CHEVROLET P1860: TCC PWM SOLENOID CIRCUIT MALFUNCTION (4L60-E)

OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Intermediate
Repair Cost	:	**$100-$250**
Can I Still Drive?	:	**Yes** (Short-term only)

What Does The Chevrolet P1860 Code Mean?

The torque converter clutch pulse width modulation (TCC PWM) solenoid valve controls the fluid acting on the converter clutch valve. The converter clutch valve controls the TCC application and release. The solenoid attaches to the control valve body within the transmission. The solenoid receives ignition voltage through circuit 239. The powertrain control module (PCM) controls the solenoid by providing a ground path on circuit 418. Current flows through the solenoid coil according to the duty cycle (percentage of ON and OFF time). The TCC PWM solenoid valve provides a smooth engagement of the torque converter clutch by operating during a duty cycle percent of ON time.

When the PCM detects a continuous open, short to ground or short to power in the TCC PWM solenoid valve circuit, then DTC P1860 sets. DTC P1860 is a type B DTC

What Are The Potential Causes Of The Chevrolet P1860 Code?

- TCC solenoid control circuit is open or shorted to ground
- TCC solenoid control circuit is shorted to system power (B+)
- TCC solenoid power circuit is open (test the ENG CNTL fuse)
- TCC solenoid is damaged or has failed
- PCM has failed

How Can You Fix The Chevrolet P1860 Code?

- Replace the AT wiring harness assembly.
- Replace the AT wiring harness assembly.
- Replace the PCM.

Reference Sources

- 2000 Chevrolet Camaro and Pontiac Firebird Service Manual - Volume 1, page 241.
- GM, 2013, Service Bullettin - Prior To Any Circuit Testing.